

Amendment
U.S. Patent Application No. 10/829,362

Amendments to the Drawings

The attached sheets of drawings include changes to Fig. 3C. The attached sheets are set forth in the Appendix and include an Annotated Sheet showing changes made to Fig. 3C as well as a set of Replacement Sheets. These sheets, which include Figs. 1-3C, replace the original sheets including Figs. 1-3C. In Fig. 3C, reference numeral 7 has been changed to reference numeral 16 to correspond with the specification.

REMARKS

Claims 1, 3 and 5-9 are pending in the subject application. Claims 1-11 have been examined and stand rejected. By way of the above amendments, claims 1, 3 and 6-9 have been amended, while claims 2, 4, 10 and 11 have been canceled. Support for the amended claims can be found throughout the specification. Favorable reconsideration of the application and allowance of all of the pending claims are respectfully requested in view of the above amendments and the following remarks.

The Examiner objects to the drawings, because Fig. 2 includes reference number 15 that is not described in the specification, and the specification references a Peltier element 16 and reference number 16 is not present in the figures. Applicant has made changes to the specification to appropriately reference element 15, while Fig. 3C has been amended to show reference number 16. The attached Appendix includes an annotated drawing sheet showing the changes made as well as replacement drawing sheets. The Examiner also objects to the specification because of reference number 14 being associated with both a flexible connection and cooling fins. The previously noted amendment to the specification corrects this inconsistency, as does the amendment in the "List of Reference Symbols" of the specification. Accordingly, the Examiner is now requested to withdraw these objections.

Claims 10 and 11 stand rejected under 35 U.S.C. §112, second paragraph, as being vague and indefinite. These claims have been canceled so as to render this rejection moot.

Claims 1-4 and 7 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,239,199 to Chiu, while claims 5, 6 and 8-11 stand rejected under 35 U.S.C. §103(a) as being obvious over Chiu. Applicant respectfully traverses these rejections in view of the above amendments and the following remarks.

Independent claim 1 has been amended to recite a device for cooling memory modules comprising: a body comprising a comb-shaped configuration in longitudinal section and including a plurality of elements, the elements thermally coupling at least two memory modules, where at least two adjacently aligned elements include surfaces that face each other, each surface including a contact element extending from and connected to the surface via a spring element

Amendment
U.S. Patent Application No. 10/829,362

that biases the contact element away from the surface, such that the contact elements extend toward and engage with a memory module that is placed between the adjacently aligned elements. Chiu fails to disclose or suggest the combined features of claim 1.

Chiu describes a vertical lead-on-chip package including a heat sink/holding fixture 31 to which is assembled an array 30 of devices 10. As shown in Fig. 10 of Chiu, the legs 31c and 31d of the fixture are opened or moved apart to facilitate insertion of heat sinks 16 into slots 31b of the fixture, and devices 10 are held between heat sinks 16 within the fixture.

Chiu fails to disclose or suggest at least the feature of providing at least two adjacently aligned elements including surfaces that face each other, where each surface includes a contact element extending from and connected to the surface via a spring element that biases the contact element away from the surface, such that the contact elements extend toward and engage with a memory module that is placed between the adjacently aligned elements as recited in claim 1.

The Examiner construes the heat sinks 16 and devices 10 of Chiu with the recited plurality of elements and the recited memory module, respectively. However, the heat sinks 16 of Chiu directly engage and contact the devices 10 (see Figs. 6 and 8 of Chiu). There is no disclosure of two adjacently aligned heat sinks 16 in Chiu that include contact elements extending from the heat sinks and that are biased away from their respective heat sinks via a spring element so as to engage the contact elements with a device 10. Therefore, claim 1 should be allowed over Chiu, and the Examiner is requested to withdraw the rejection of this claim based upon this reference.

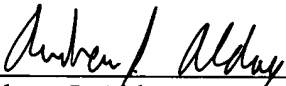
The remaining claims depend, either directly or indirectly from claim 1. Accordingly, these claims should also be allowed over Chiu based upon the previous remarks.

In view of the foregoing, the Examiner is respectfully requested to find the application to be in condition for allowance with claims 1, 3 and 5-9. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

Amendment
U.S. Patent Application No. 10/829,362

Applicant hereby petitions for any extension of time that may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 05-0460.

Respectfully submitted,



Andrew J. Aldag
Registration No. 40,483

EDELL, SHAPIRO & FINNAN, LLC
1901 Research Boulevard, Suite 400
Rockville, Maryland 20850-3164
(301) 424-3640
Hand Delivered on: September 23, 2005

Amendment
U.S. Patent Application No. 10/829,362

APPENDIX



3/3

FIG 3C

